ary for more efficient shopping or to maintain cold items, etc. Additionally, in some embodiments, the device includes a GPS system. In this embodiment, the device may display a map of the store with locations of the items on the user's shopping list. Referring to FIG. **8**, an illustration of this embodiment is shown.

[0116] Other embodiments include a vibrating shopping cart handle that may vibrate when the user comes within a predetermined proximity to an item on the shopping list. Other embodiments include an audio alarm and still other embodiments include a combination audio, vibrate and/or combination of visual and any other type of indication to the user.

[0117] In one embodiment, the speed-shopping system includes purchasing the food items or other products using the device. In still other embodiments, the device on the cart may track the addition of items into the shopping cart (either by user indication, scan, RFID transponder indication, or other) and tally the items. When the cart moves past a particular point in the store, for example, within 3 feet of the door, the device may charge the user's profile electronic account the total of the food items or other items that have been placed in the cart. In some embodiments, the user bags the items using an embodiment of the above described self-bagging apparatus (shown in FIGS. **7**A-**7**C).

[0118] SMART SHELVES. Another embodiment includes a smart shelf system. In one embodiment, the shelves may include a means for signaling the device. The means can include, but is not limited to, one or more of the following: an electronic display on the store shelf, a light, an RFID or other transponder. The shelf is used to signal to the device. However, in other embodiments, the transponder is located within the packaging of the food item. In the smart shelf embodiment, one transponder is located on the shelf. The transponder communicates with the device regarding the product located in the particular shelf location.

[0119] In some embodiments of the smart shelf, a monitor is included, or the entire shelf is a monitor. The monitor may signal with an audio or visual alarm or other type of signal. The smart shelf may also track the number of products located in a particular shelf location. This may be used to manage inventory or food items. In still other embodiments, a single transponder for an entire store may be used to monitor the activity of inventory or food items on the shelves. This may be used by store management or by a vendor to monitor activity of a particular food item or other type of product.

[0120] In one embodiment, the smart shopping system includes carts as described above with devices on the carts, as well as smart shelves, self bagging and auto-charging. However, in other embodiments, only one or any combination of these embodiments are included in the system.

[0121] In one embodiment, the devices on the shopping cart, linked to a network, may track users' rate of shopping based on the shopping list in the user profiles. In this way, a store may track the progress of any shopping, can re-route shoppers in real-time by changing the trip tick and direction on the map, may also be used to direct the users to a check out counter to prevent long lines.

[0122] In one embodiment, the shopping cart includes an electronic display that may play commercials or educate the consumer regarding nutrition or specials in the store.

[0123] In one embodiment, once the user enters the store, based on the users shopping list, the device sends the deli, butcher, baker, florist, prescription, or any other customized order available in the store, electronically to the particular service area. Thus, the orders are placed and timed so that the items will be ready when the device directs the user to the area for the pick-up.

[0124] In some embodiments, the RFID transponder is on the food items. In some embodiments, the RFID transponder is on shelves. In some embodiments, the device reads bar codes on the food item with a camera. In other embodiments, the device reads the bar code with a bar code scanner. In some embodiments, the device contains a camera which physically recognizes product. Some embodiments include a web portal, where the user sets up ID, all rules and databases customized via web portal which is then downloadable onto the device. Some of these embodiments include a pay-for service.

[0125] INFORMATION AND DATABASES. The food item information is contained in a database. As described above, the database is either stored on the device and/or updated by an outside/remote database or may be stored on a remote database where the device accesses the remote database for all food item information. In some embodiments of the store embodiments as described above, a locally accessed database may be available and accessible to the device while in the store, i.e., in addition to the device's stored database, the store itself may "broadcast" a database. In any case, the device may access multiple databases. In some embodiments, the databases are multi-dimensional database. These allow searching through unstructured data or an expert/learned system. These databases also allow users to search by any attribute.

[0126] In some embodiments, the databases are built by the users, thus, as the user chooses a food item, the database adds the food item to the user's database, thus customizing the database through use. This is a learning database.

[0127] The communication between the database and the device may include any method of transferring information from one device to another. This includes, but is not limited to blue tooth, cellular communication, bar code, and radio.

[0128] In some embodiments, the database tracks the food items ingested by a particular user. The database may suggest food items based on an amount of time since the user ingested a particular item (according to their user profile or according to a store or organization broadcast message in the case of locally broadcast databases) for example, vegetables and fruits. The device may suggest the item either by audio, or visual, including but not limited to, a picture.

[0129] The following types of data may be included in the database(s). Various embodiments may be used alone or in any combination.

[0130] Nutritional Data. Nutritional data may be provided by existing databases. Additional or updated information for nutritional information may be downloaded from the web or purchased or otherwise provided by a company or organization.

[0131] Medical Data. Interaction data exists in a database in one embodiment. This can track allergies and reactive substances and advice user of same. Users may update their user profile and based on also, program products to be avoided based on medical data.

[0132] Third party rules. These can be parent rules, children rules managing elder parents, institutional/assisted living rules, or rules provided by a particular medical treatment group.